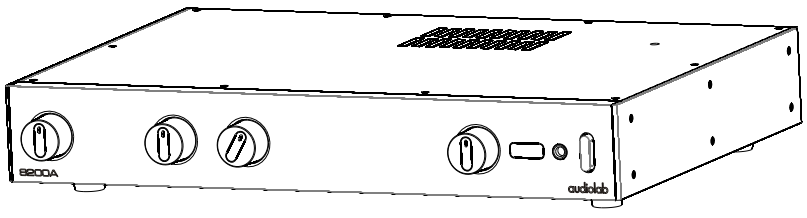
Service Manual

Electronics

8200A



www.audiolab.co.uk

audiolab

Rev	Date	Update Content
V01	2010.10.13	First Version

CONTENT

1. Introduction 1
2. Specification 2
3. Assembly Sketch 3
4. Schematic Diagram 4-16
5. Wiring Diagram 17
6. Silkscreen of Top/Bottom 18-20
7. Maintenance Alignment Procedure 21
8. Assembly Parts List 22-23
9. Electronic Parts List 24-31

No part of this document may be reproduced or transmitted in any form or by any means,electronic or mechanical, for any purpose, without the express written permission of International Audio Group Limited (IAG)

This manual is for the exclusive use of IAG, its approved distributors and approved UK service agents.

No part of this manual shall be transferred to any other party without the express written permission of IAG.

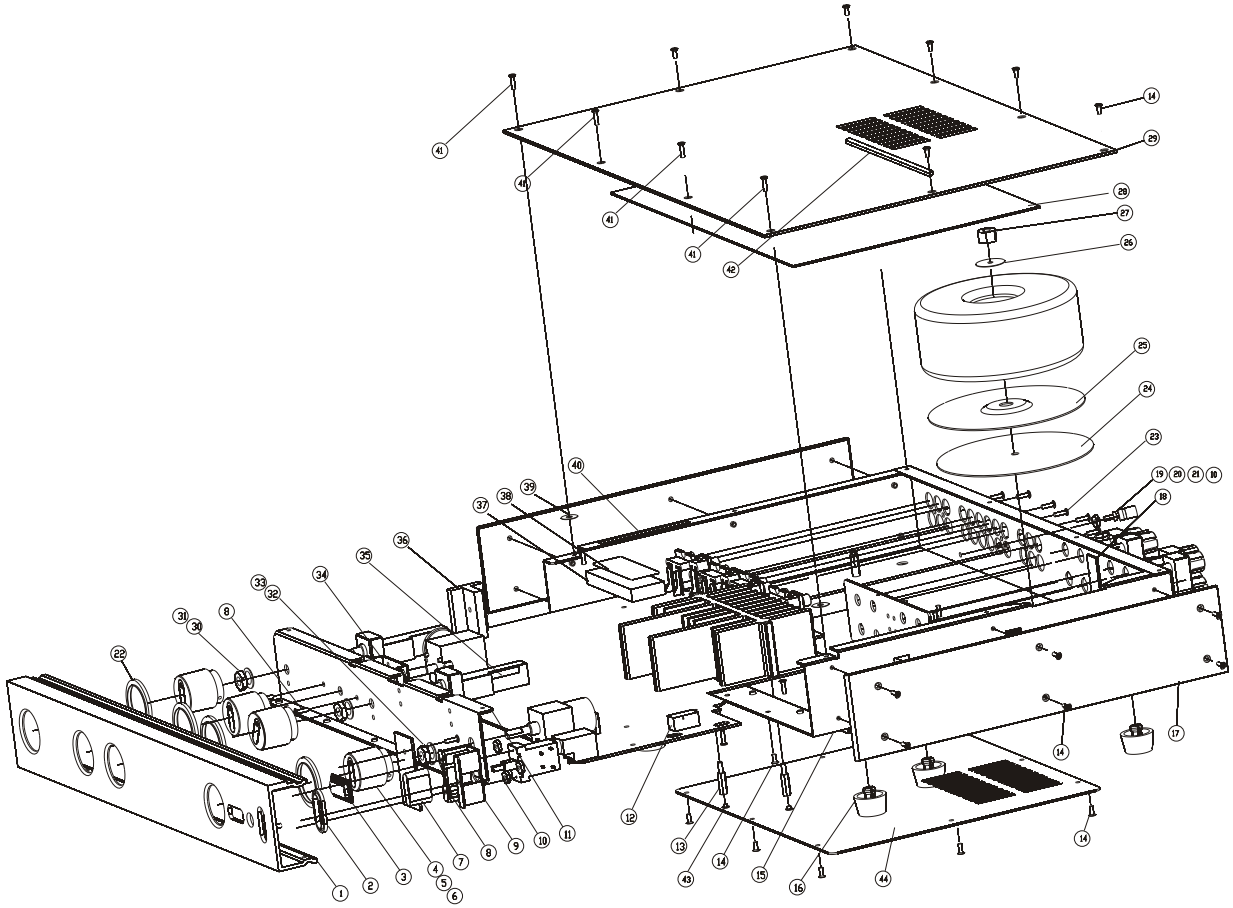
It is the responsibility of the user to ensure that all the information contained in this manual is current. Notification for new issues of this manual and minor updates will be given via the IAG web-site or on request.

This manual has been prepared with the greatest care, it is intended for information only and no liability shall be accepted for errors or changes to specification.

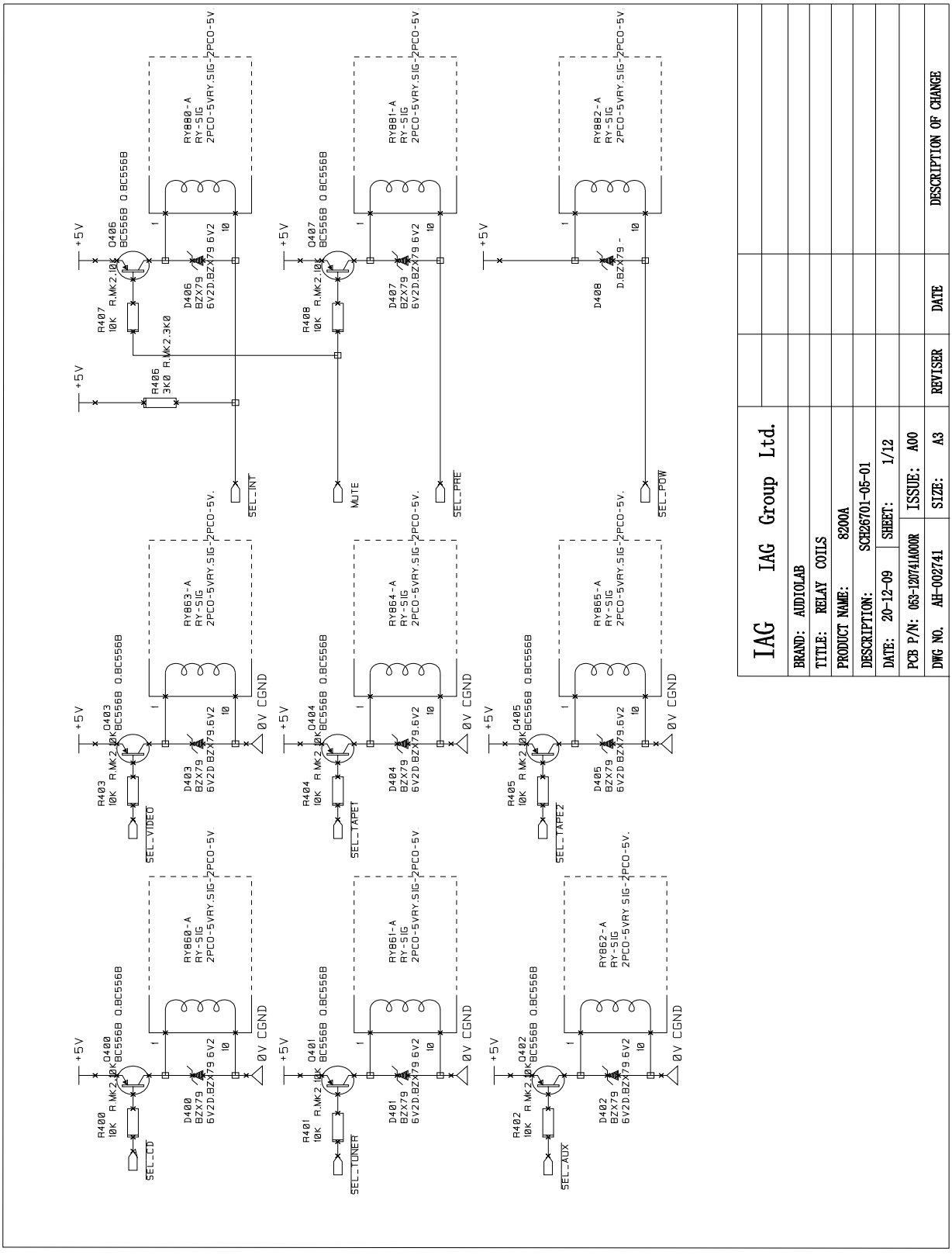
For further service information, parts lists and updates, please contact our web-site at www.international audio group.com .

© 2010 International Audio Group Limited. All rights reserved.

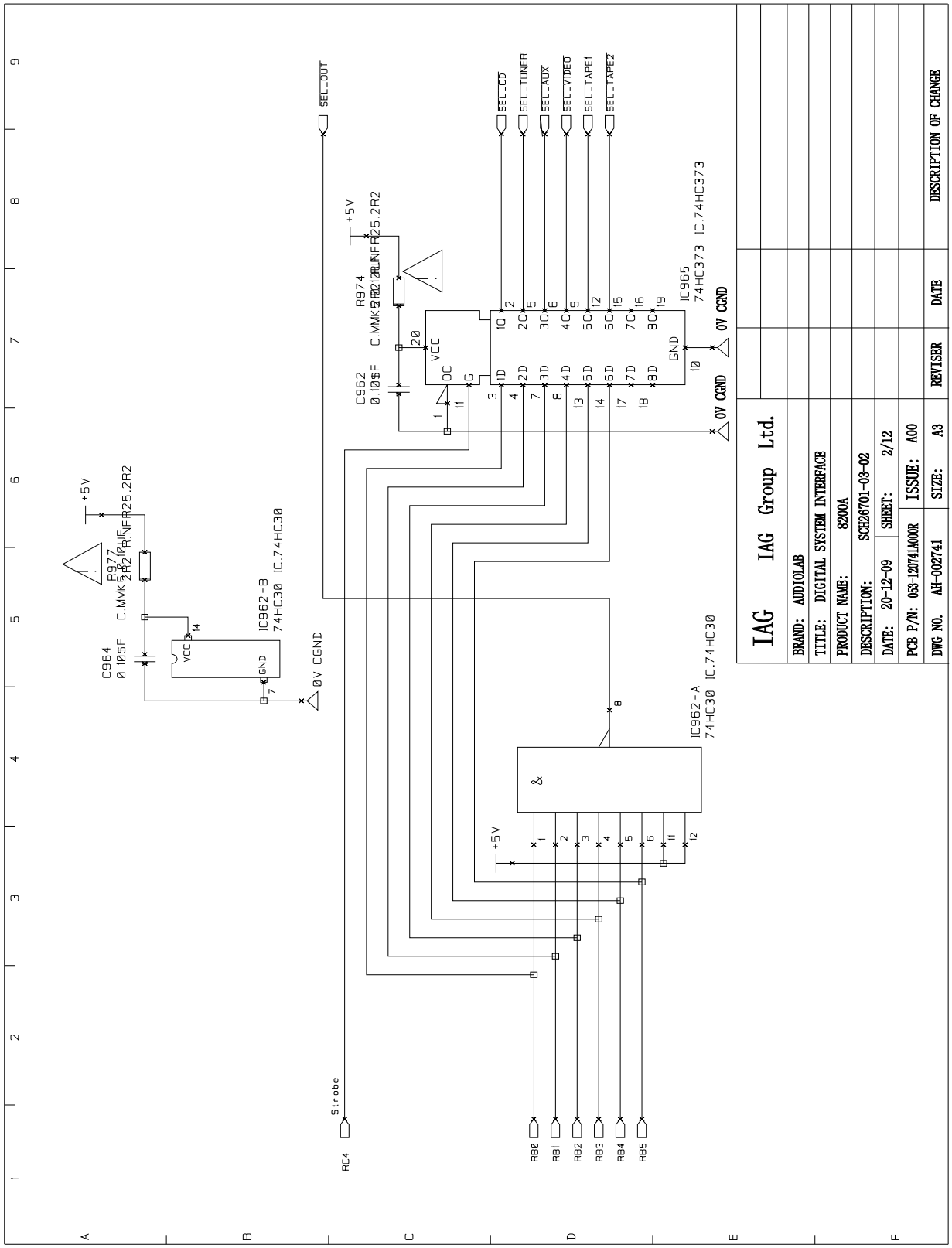
Rated Output Power	60W per channel into rated load impedance(8 Ohms)
	with both channels driven
Inputs	CD,TUNER,AUX,VIDEO,TAPE1,TAPE2:125mV/20kΩ IHF
	POWER AMP:782mV/47KΩ
Gain	PRE-AMP:9dB@1kHz
	POWER AMP:29.0dB@1kHz
Signal To Noise Ratio	CD,TUNER,AUX,VIDEO,TAPE1,TAPE2:
	Better than 80dB(IHF,rel.0.5V pre-amp output)
	POWER AMP:better than 80dB(IHF,rel.0dBW)
Frequency Response	CD,TUNER,AUX,VIDEO,TAPE1,TAPE2 and POWER AMP:
	20Hz-20kHz±0.5dB:1Hz-65kHz-3dB.
Total Harmonic Distortion & Noise	Less than 0.07%
Channel Balance	Within 1dB
Channel Separation	Better than 60dB@1kHz any input
Crosstalk	Better than 80dB@1kHz
Polarity(phase)	Non-inverting for all inputs and outputs
Pre-amp Output	PRE OUT1 and PRE OUT2:Output Impedance 100Ω
	Maximum Output>7.3V RMS
Headphone Output	Output impedance:330Ω
	(suitable for headphones8Ω-2kΩ impedance)
Record Output	VIDEO OUT,TAPE1 OUT,TAPE2 OUT:
	Output impedance:1kΩ
	Gain from input to record output 0dB(x1)
Muting	Muting controlled manually or automatically
Accessories Supplied	AC Power Cord
	Instruction Manual
	8200RC Remote Control with 2xAA batteries
Operating Temperature Range	10-35℃
Power Requirements(Depending on Region)	50-60Hz 100V,110-120V,and220-230V models available
	Maximum Power Consumption:440VA
Dimensions(WxHxD)	445x74x335mm-including feet,terminals and controls
	445x64x302mm-excluding feet,terminals and controls
Weight	Net:7.4kg
	Shipping:8.8kg



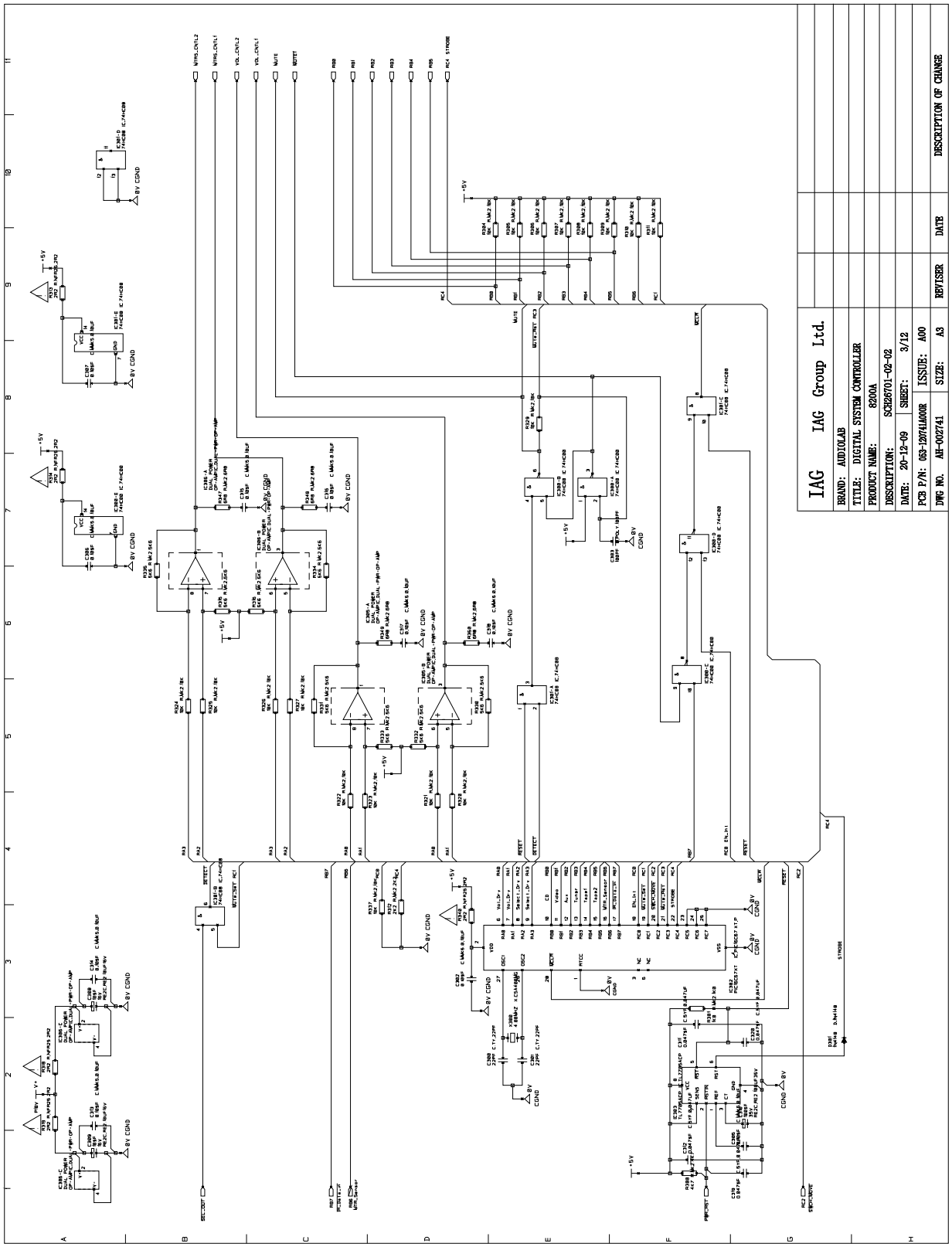
8200A-Mainboard-P1/12



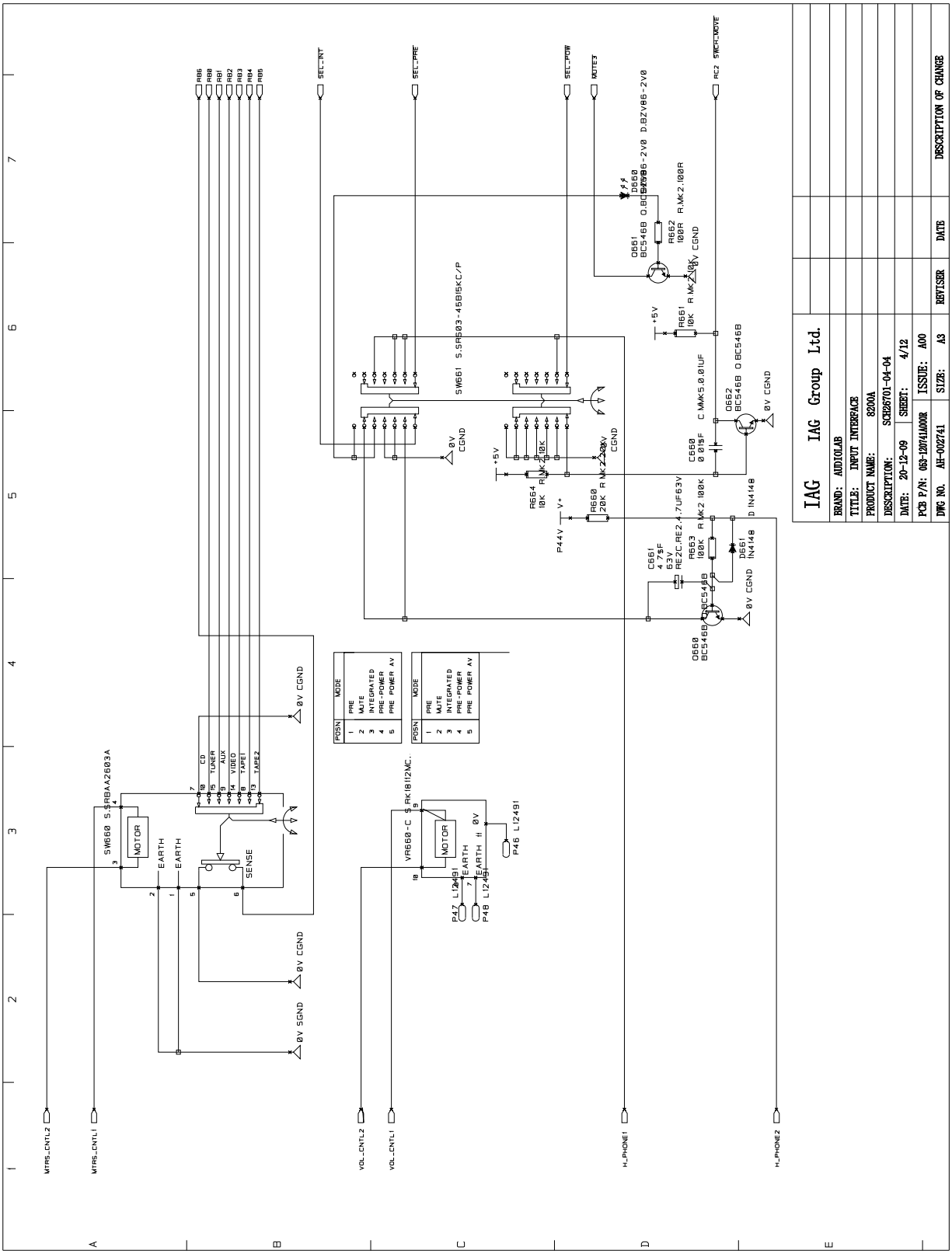
8200A-Mainboard-P2/12



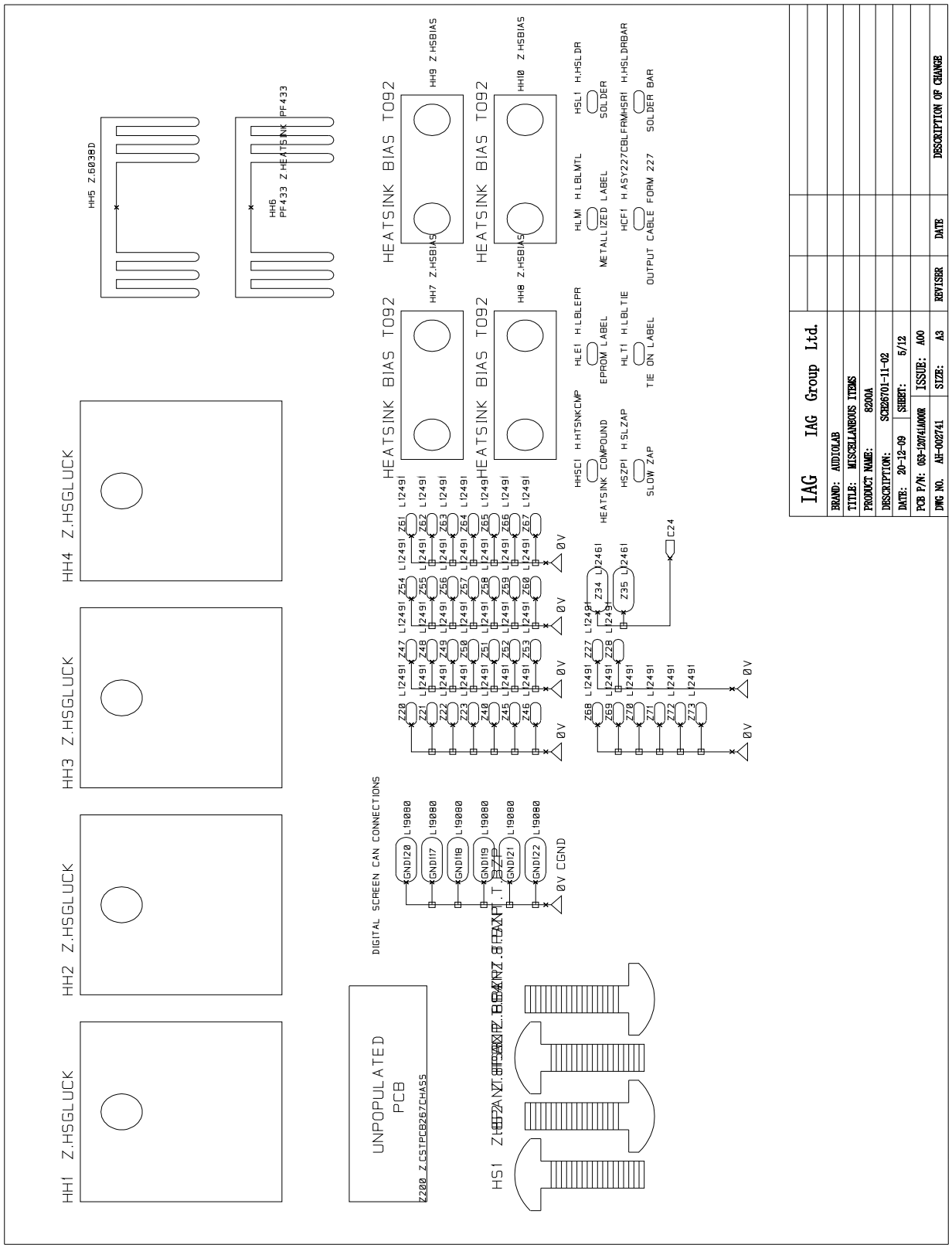
8200A-Mainboard-P3/12


IAG Group Ltd.
BRAND: AUDIOLAB
TITLE: DIGITAL SYSTEM CONTROLLER
PRODUCT NAME: 8200A
DESCRIPTION: SCH26701-02-02
DATE: 20-12-09 SHEET: 3/12
PCB P/N: 063-120741A0008 ISSUE: A00
DWG NO. AH-002741 SIZE: A3 REVISER DATE DESCRIPTION OF CHANGE

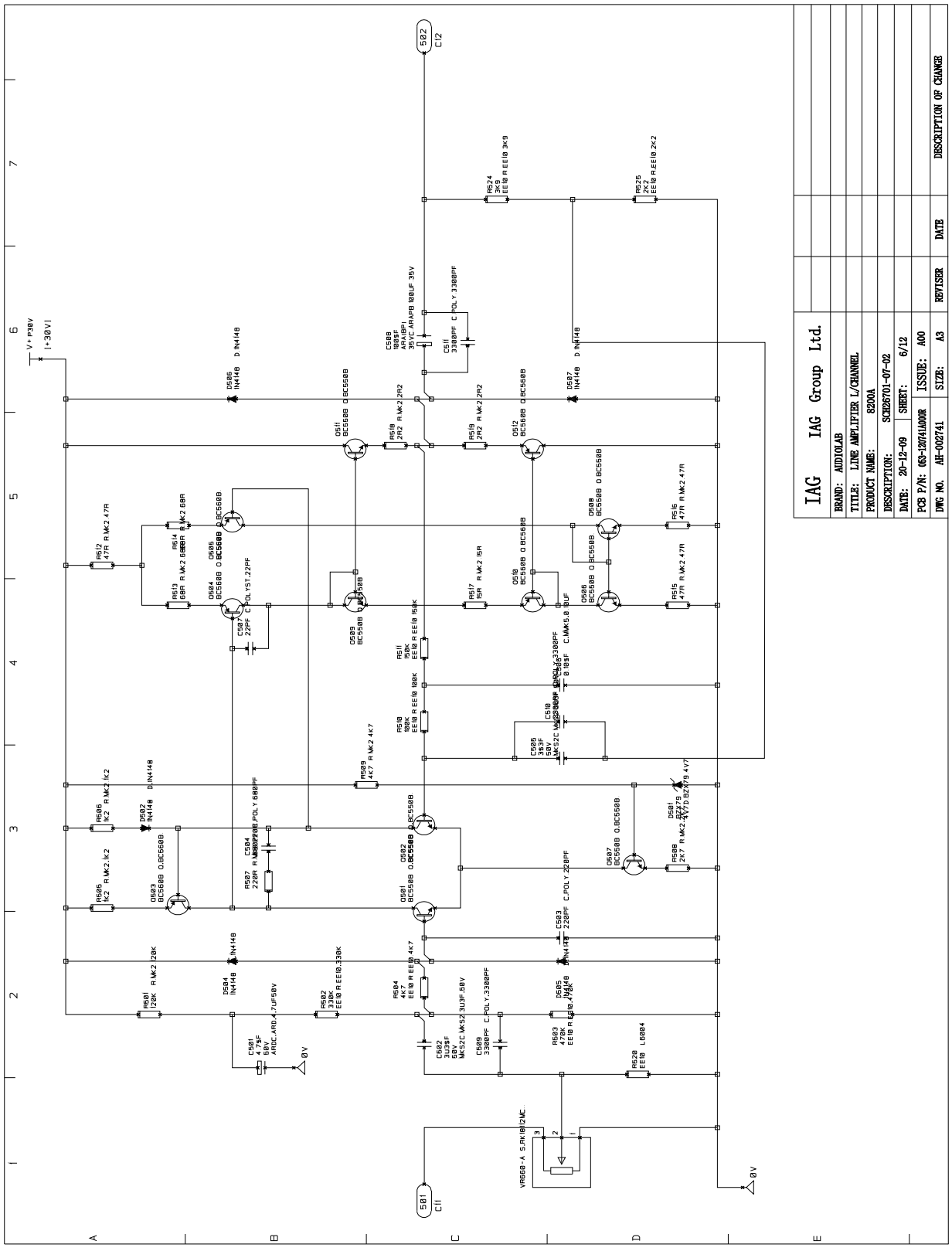
8200A-Mainboard-P4/12



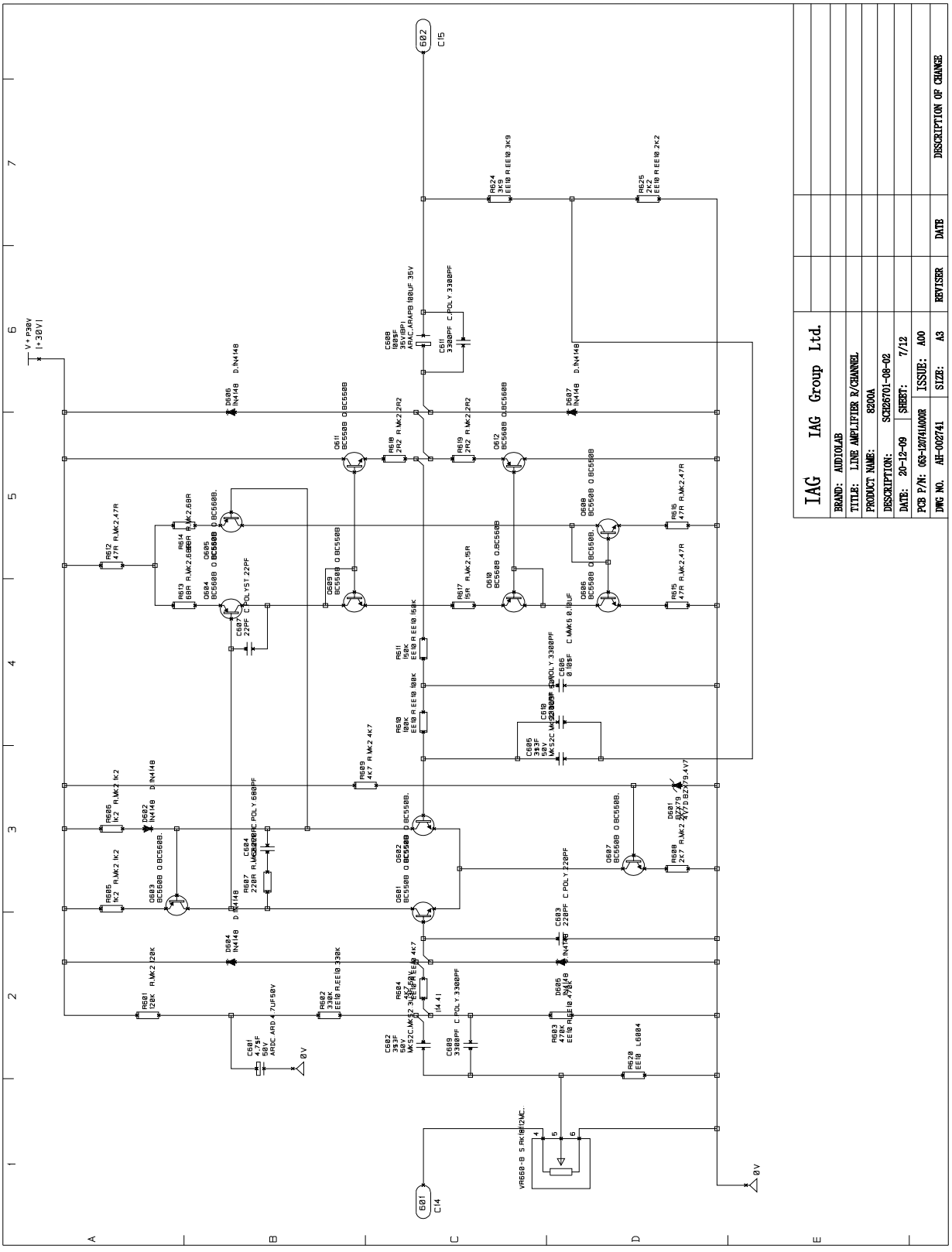
8200A-Mainboard-P5/12



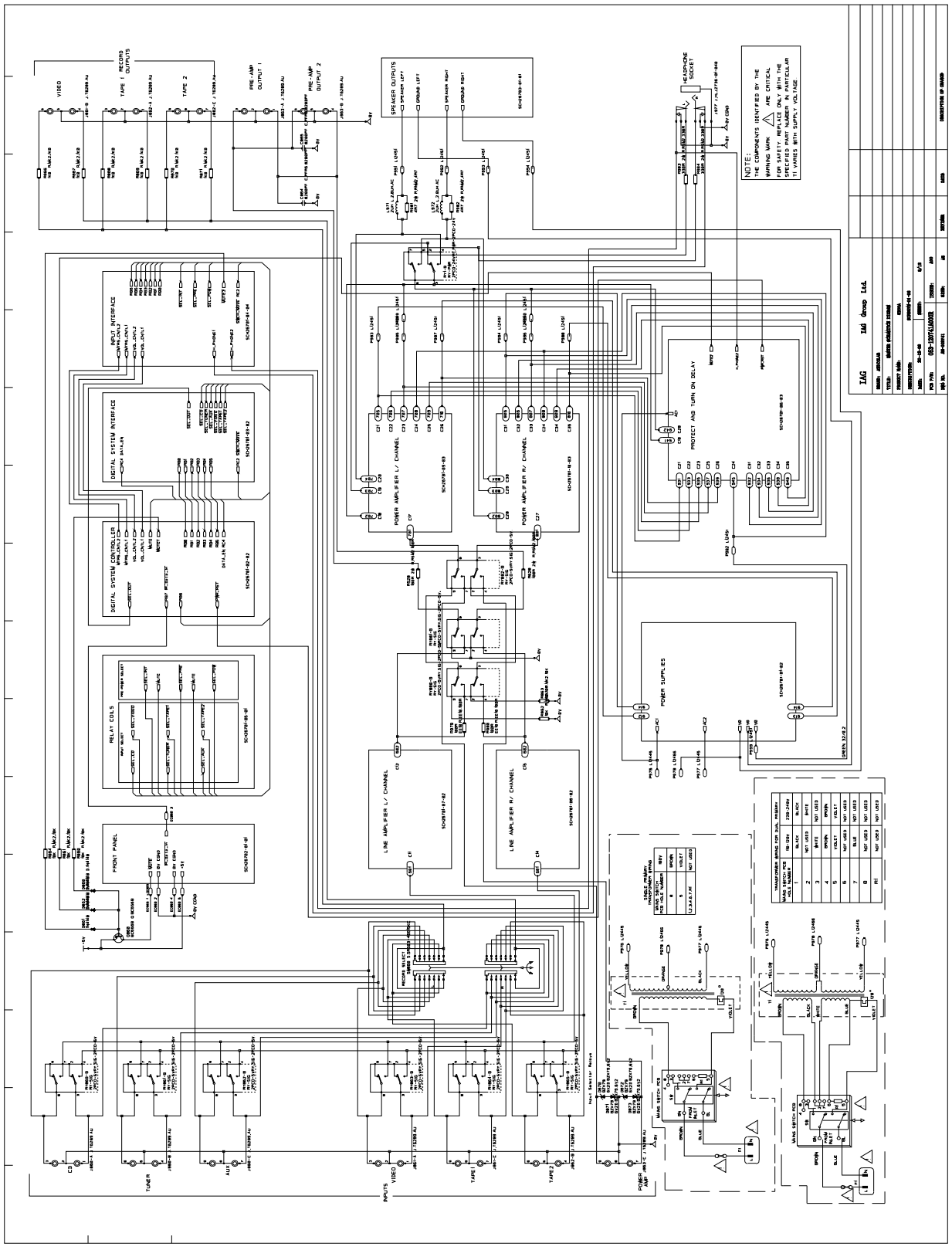
8200A-Mainboard-P6/12



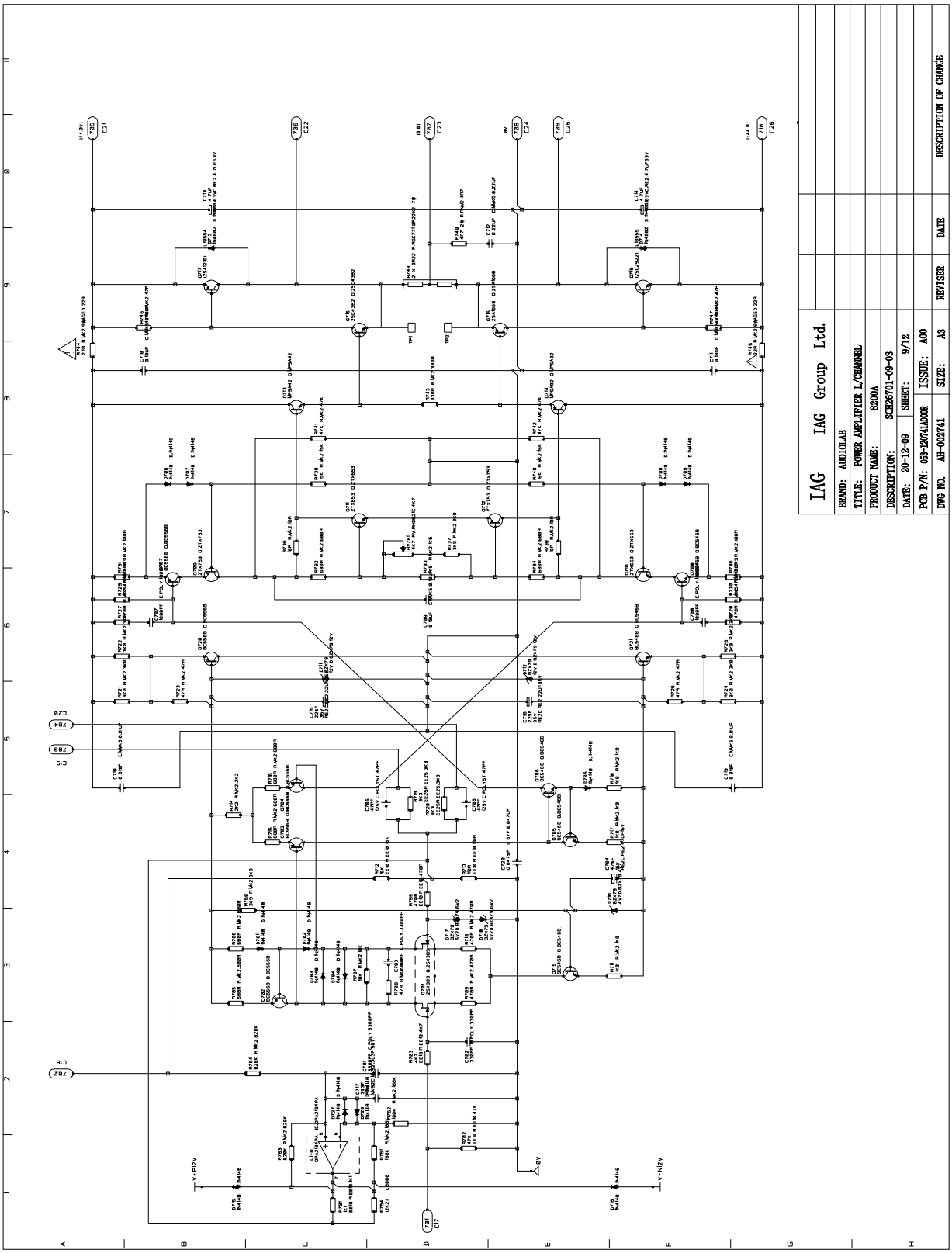
8200A-Mainboard-P7/12



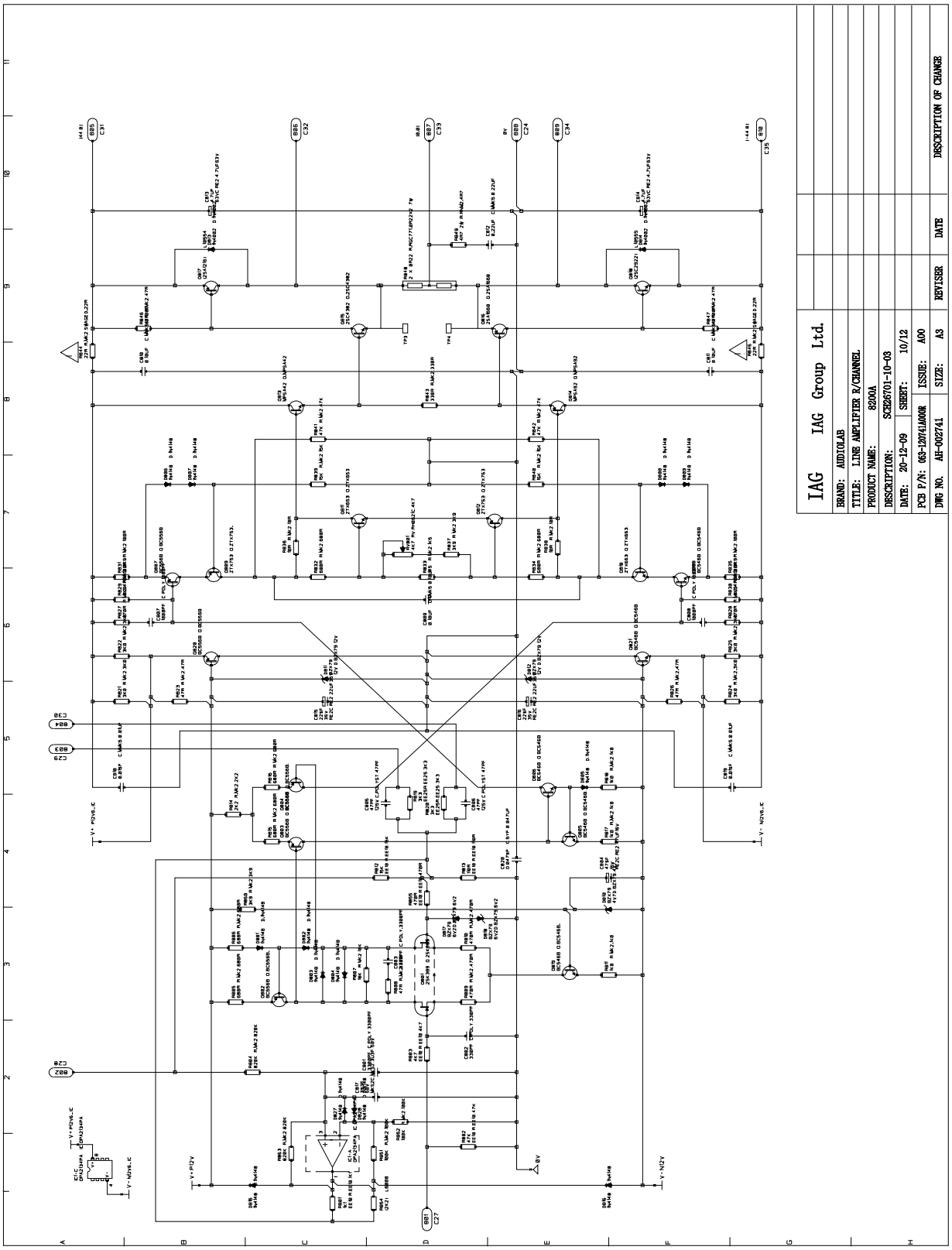
8200A-Mainboard-P8/12



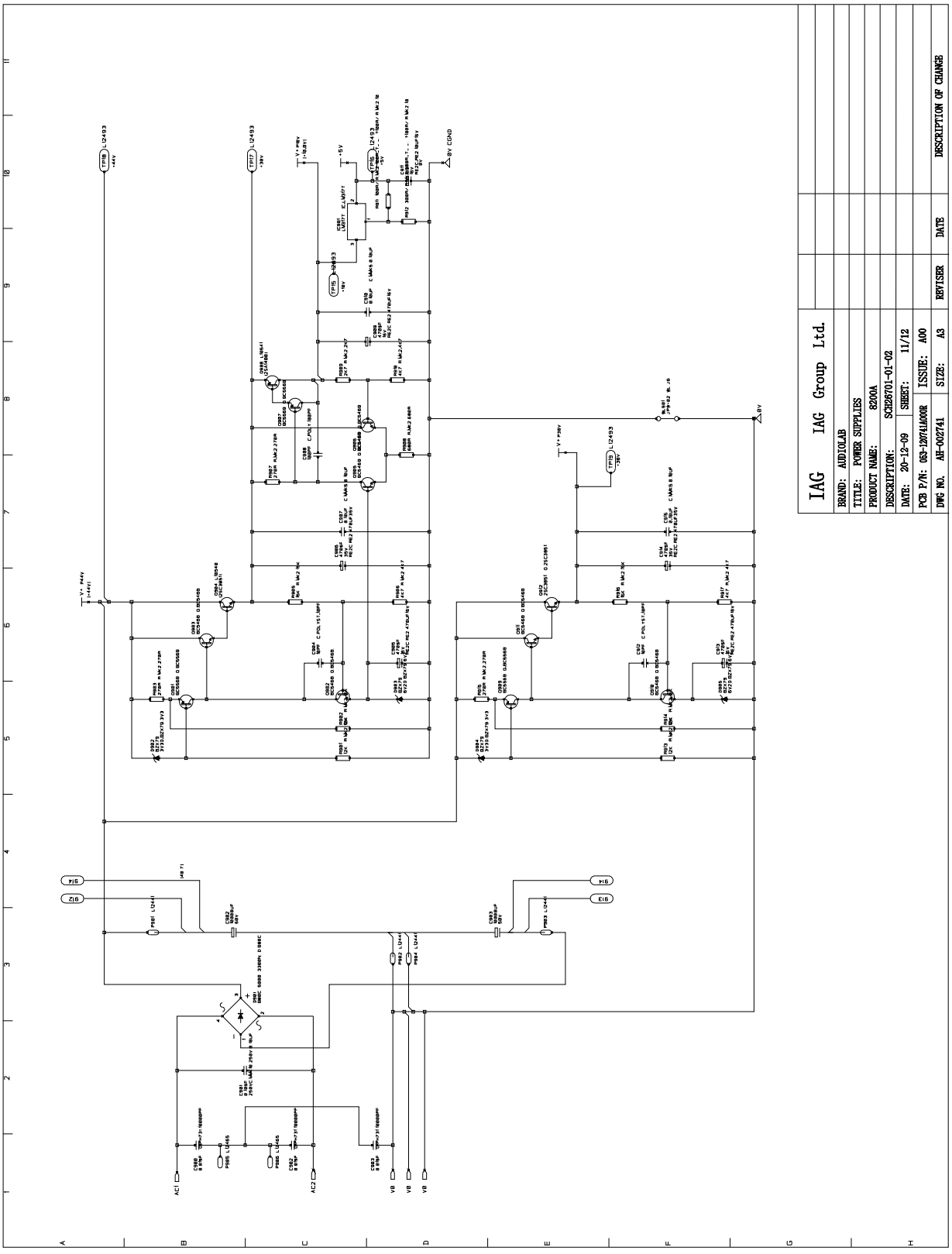
8200A-Mainboard-P9/12


IAG Group Ltd.
BRAND: AUDIOLAB
TITLE: POWER AMPLIFIER L/CHANNEL
PRODUCT NAME: 8200A
DESCRIPTION: SCH026701-09-03
DATE: 20-12-09 SHEET: 9/12
PCB P/N: 063-12074A0008 ISSUE: A00
DWG NO. AH-0027741 SIZE: A3 REVISER DATE DESCRIPTION OF CHANGE

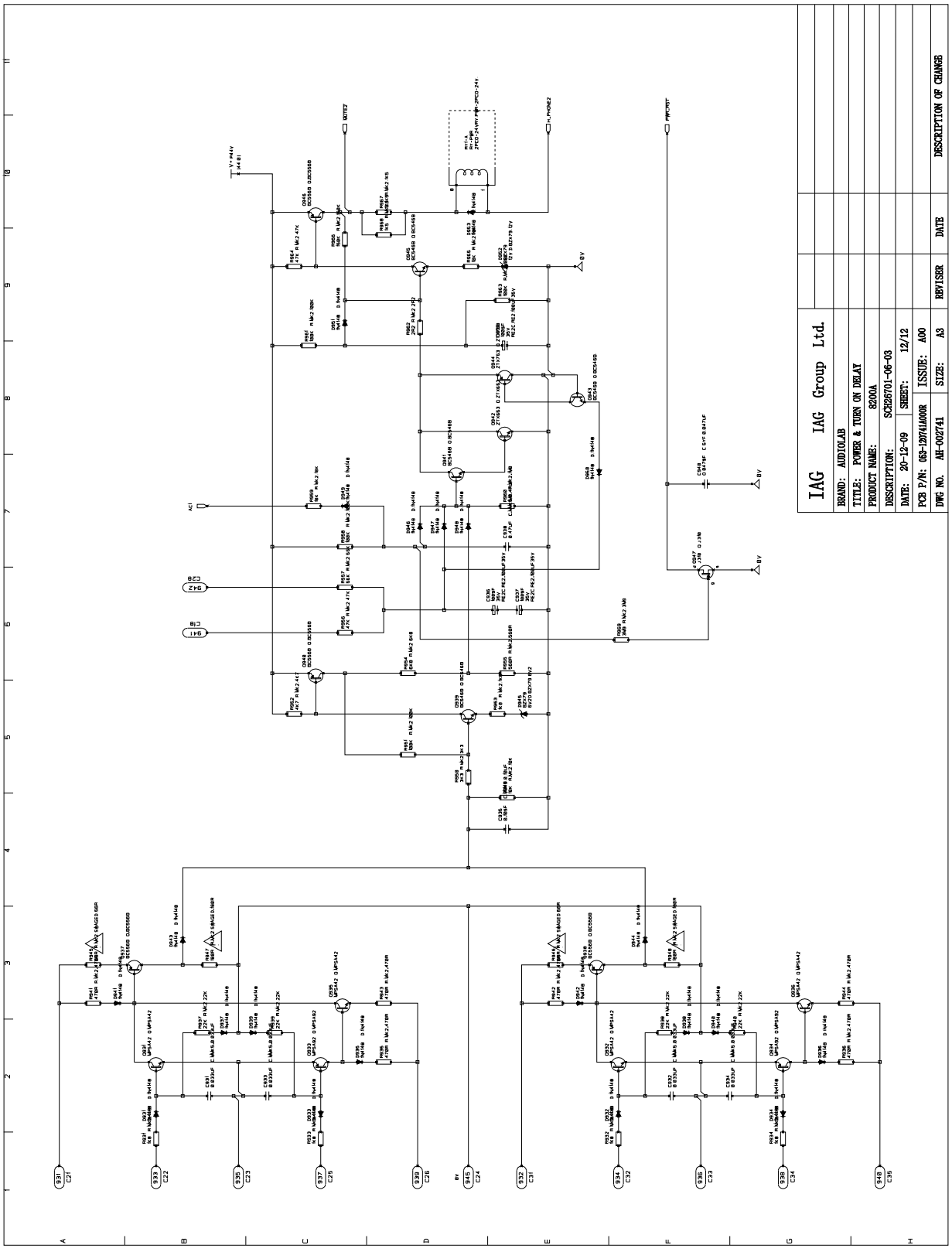
8200A-Mainboard-P10/12


IAG IAG Group Ltd.
BRAND: AUDIOLAB
TITLE: LINE AMPLIFIER R/CHANNEL
PRODUCT NAME: 8200A
DESCRIPTION: SCH26701-10-03
DATE: 20-12-09 SHEET: 10/12
PCB P/N: 063-120741A000R ISSUE: A00
DWG NO. AH-0027741 SIZE: A3 REVISER DATE DESCRIPTION OF CHANGE

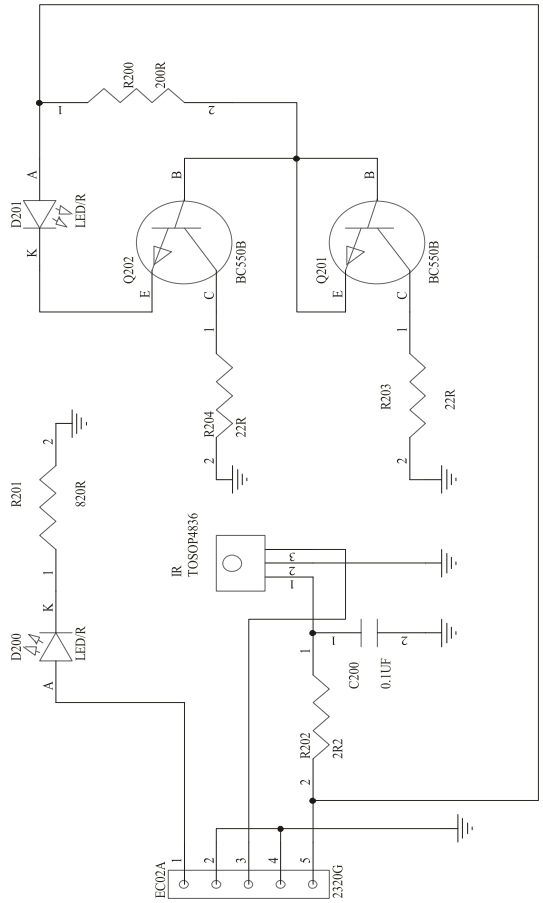
8200A-Mainboard-P11/12



8200A-Mainboard-P12/12



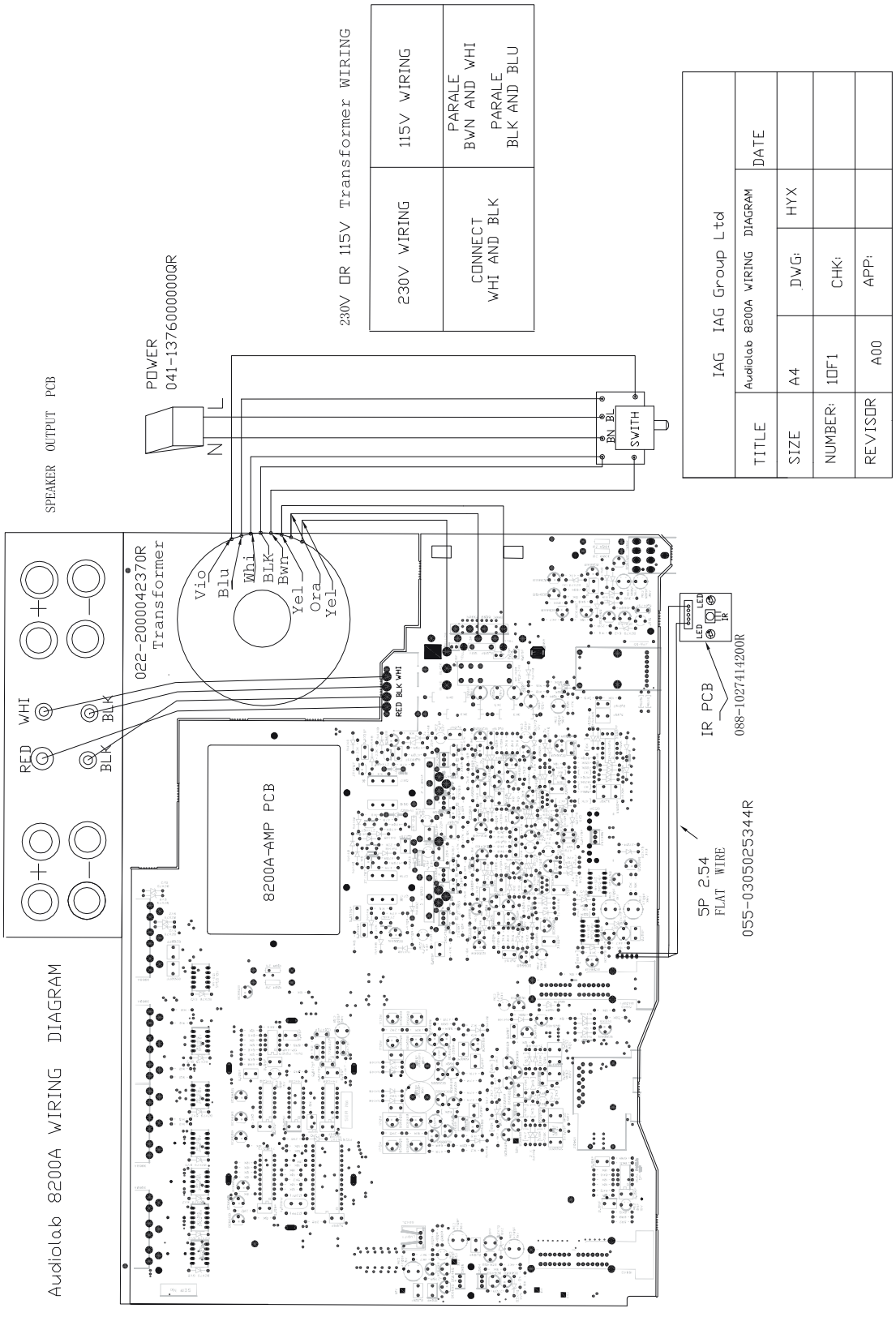
8200A IR-Receiver-P1/1



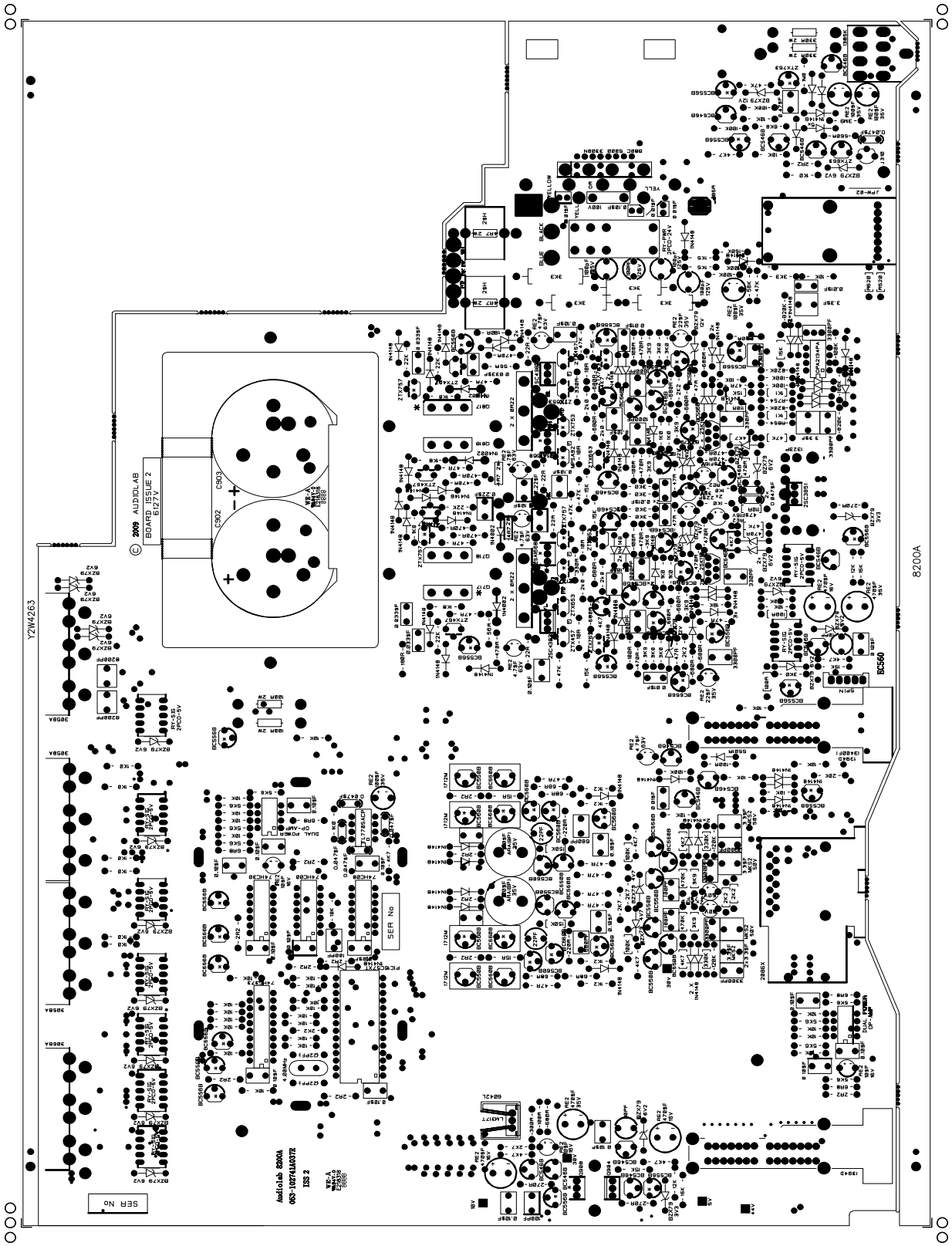
8200A IR SCH

053-1027411046R

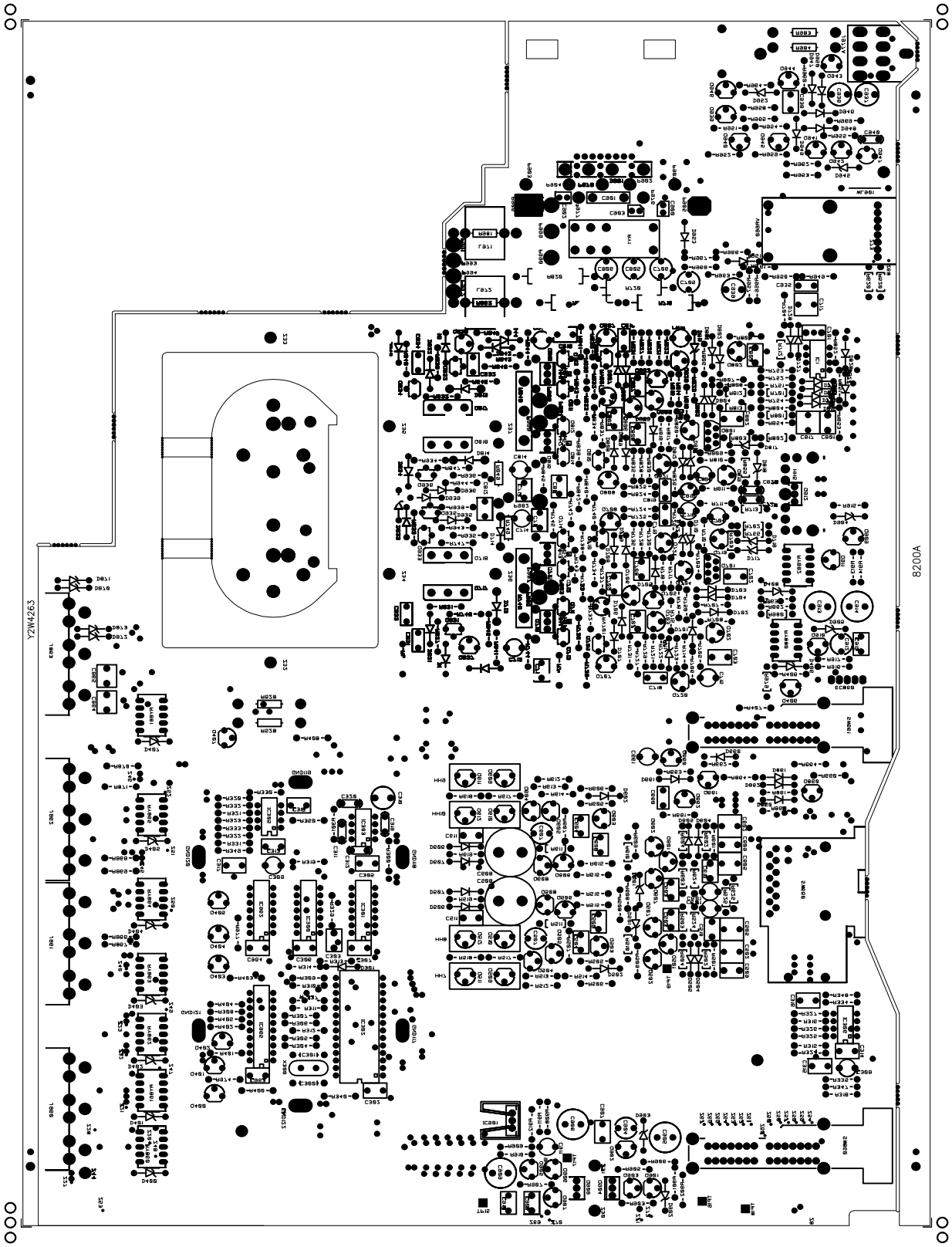
8200A -Wiring Diagram-P1/1



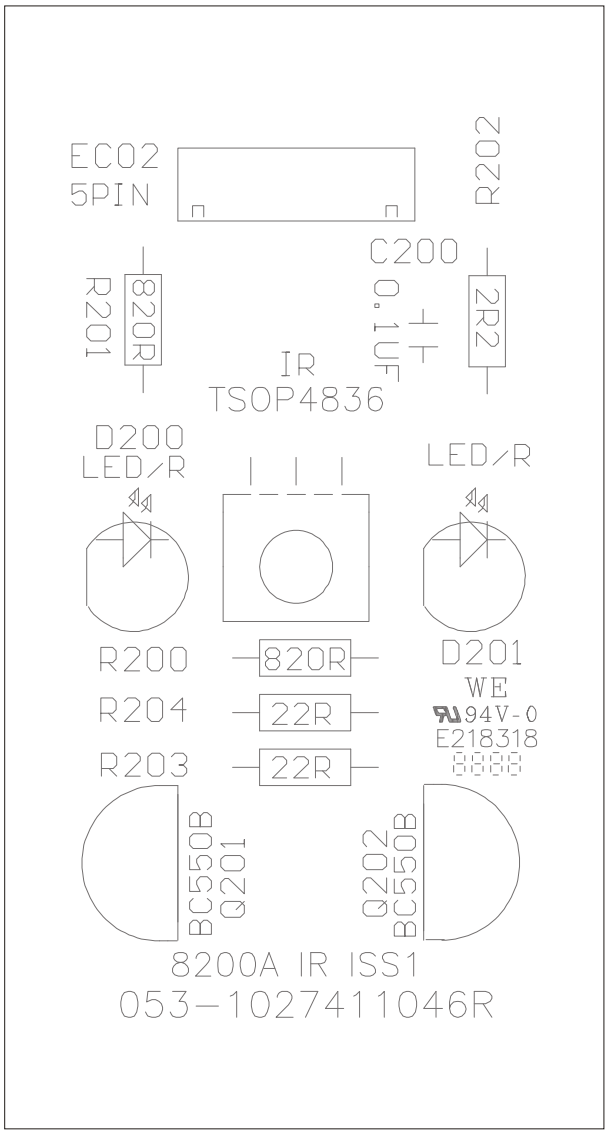
8200A-MainBoard Top Silkscreeen-P1/1



8200A-MainBoard Bottom Silkscreeen-P1/1



8200A IR-Receiver Silkscreeen-P1/1



8200A -Bias Procedure And Ageing test step-P1/1

Audiolab 8200A Bias Procedure

This procedure must only be carried out after the unit has passed a full functional test .

1.Connect the unit to be biased to mains and switch on. The mains voltage should be set to 230VAC or 120VAC +- 2% while the test is done.

2.Wait for the unit to power up.

3.Set bias as shown in table below.

4.The test continues until the bias is steady at the final value in the table.

For 8200A bias is measured across R748 (left channel) and R848 (right channel).

All settings are mV dc.

Remarks：Also the test continues unil the bias is steady at the final value in the table.

Product	Initial setting	After 15 mins	After 30 mins
8200A	60 –65	24 – 25	21.5 – 22.5

8200A -Ageing test step

Ageing test step	**Equipment andTools**
1: Equipment and Set up	
1):Connect the speaker terminal to 8 ohm resistor (200W), AC230V input.	
2):Signal generator set to 1KHz and switch the 8200A to CD input.	Anti-ESD belt
3):Set the "RECORD" and "INPUT" knob to CD. "MODE" switch to "INTEGRATED" position. Volume set to Max.	multimeter
2: Ageing test	Screw driver
1)Tune the "VOLUME" pot to MIN and power ON the 8200A.	Signal generator
2):Adjust the "VOLUME" until the output meet 8V rms.	Step transformer for AC mains
3):Add 5% of AC input for the test.	

unit rated voltage	variac voltage
AC240V	AC250V±2%
AC220、230V	AC240V±2%
AC110V	AC120V±2%
AC100V	AC110V±2%

4):Soak test with the condition above with 48 hours.
5):Take out the input signal and adjust the bias vs RV701 and RV801 cross the resistor R748 and R848. The voltage should be between 21.5 - 22.5mV.
Notes: 1.If the Bias Okay, switch off the unit and put "PASSED" mark on the unit.

8200A-Assembly Bom-P1/2

R/N	P/N	PART NAME	DESCRIPTION	QTY
1	300-1027410000R	front panel	screened, light grey(silver anodized)	1
2	273-1028410000R	display window	30.9*16.3*4.5mm	1
3	215-1027410001R	button cap	silver painted,ABS758#	1
4	340-1027410000R	knob	silver painted	4
5	307-1027410000R	knob indicator	silver painted,φ6.0 L=24MM	4
6	574-3000800011R	screw	M3*8 NI	9
7	215-1027410000R	power button	silver painted,ABS757#	1
8	588-3000066037R	screw	M3*6	10
9	305-1027410002R	Main switch bracket	painted	1
10	500-3050240300AR	nut	M3 NI	4
11	308-1027410000R	metal block	painteded	1
12	263-0020100102R	EVA	20*10*10（thickness）mm，EVA，black	1
13	565-0515100001-1R	bolt	H5*15mm	2
14	534-3002061006R	screw	M3*6NI	23
15	604-1027410002-2R	chassis	silver painted	1
16	226-0230191911R	feet	φ23*φ19*13	4
17	319-1027410001R	side panel	sand blasting,anodized silver/black	2
18	826-0004604615R	insulation pad	46*46*1.0mm	0.5
19	801-0080030030R	ground terminal cap	Φ8*Φ3*3mm	1
20	521-3005060500AR	washer (lock type)	4*9*0.5mm NI	1
21	086-3811000000R	ground terminal	1821T098-00	1
22	215-1027410002MR	knob cap	Φ37*3.2mm，POM、black	4
23	588-3000106037R	screw	M3*10	8
24	231-2114000102R	rubber washer	Φ114*1（thickness）mm、black	1
25	368-1027410000R	transformer insulation board	black painted	1
26	513-6412150780R	washer	φ6.4Xφ12X1.5 NI	1
27	500-6000000300R	nut	M6	1
28	826-0040024015R	insulation pad	400*240*1.0mm	1
29	302-1027410002R	top cover	sand blasting,anodized silver/black	1
30	501-7075230300R	nut	M7*0.75mm	2
31	513-7212050300R	washer	Φ12*Φ7.2*0.5*2mm	2
32	501-8313200300R	nut	Φ8.3*2mm	1
33	513-9014050300R	washer	Φ14*Φ9*0.5mm	1
34	305-1027410000R	bracket	painteded	1
35	318-1377000000R	metal plate for encoder	29*9*1mm	1
36	306-1027410000R	heatsink (T type)	anodized black	1
37	336-1027410000R	shield cover	iron	1
38	415-1027410000R	shield cover sticker	silver	1
39	231-2013005012R	PVC washer	Φ12.5*Φ4.5*0.1mm	5

8200A-Assembly Bom-P2/2

40	262-0500005010R	dustproof pad	5*50*0.25dustproof	16
41	534-3002100606R	screw	M3*10	4
42	425-0130000652R	EVA	4.5*6*130mmblack	2
43	520-3006400000R	plastic washer	TW-4	2
44	303-1027410000R	bottom cover	silver painted	1

Remark:Colour DifferenceTable

R/P	P/N	PART NAME	DESCRIPTION	QTY
1	300-1027410000R	front panel	screened, light grey(silver anodized)	1
	300-1027420000R		screened, light grey(black anodized)	1
3	215-1027410001R	button cap	silver painted,ABS757#	1
	215-1027420001R		black painted,ABS757#	1
4	340-1027410000R	knob	silver painted	4
	340-1027420000R		black painted	4
5	307-1027410000R	knob indicator	silver painted,φ6.0 L=24MM	4
	307-1027410000R		black painted,φ6.0 L=24MM	4
7	215-1027410000R	power button	silver painted,ABS757#	1
	215-1027420000R		black painted,ABS757#	1
14	534-3002061006R	screw	M3*6NI	23
	534-3002060906R		M3*6 black	33
15	604-1027410002-1R	chassis	silver painted	1
	604-1027420004-2R		black painted	1
17	319-1027410001R	side panel	sand blasting,anodized silver	2
	319-1027420001R		sand blasting,anodized black	2
23	588-3000106037R	screw	M3*10NI	8
	527-3012100806R		M3*10black	8
29	302-1027410002R	top cover	sand blasting,anodized silver	1
	302-1027420000R		sand blasting,anodized black	1
41	534-3002100606R	screw	M3*10NI	4
	534-3002100906R		M3*10black	11
44	303-1027410000R	bottom cover	silver painted	1
	303-1027420000R		black painted	1

8200A -Electronic Bom-P1/8

R/N	P/N	PART/NAME	DESCIPTION	QYT	LOCATION
1	046-9400000400R	909 terminal	red/black	4	
2	062-1220000200R	mains cable	2meter American	1	
3	041-1376000000QR	MAINS SWITCH	SWITCH MAINS 2 P SDDSA 3289A	1	
4	071-1100000000R	tie wrap	100MM YJ-100	20	
5	060-4181650012QR	12AWG WIRE	red	1	
6	060-4181600412QR	12AWG WIRE	black	2	
7	060-4181650512QR	12AWG WIRE	white	1	
8	044-1700000000QR	MAINS INLET	MAINS INLET 2 POLE 2 FUSE LOCS	1	
9	742-3501000000R	heatshrink tube	black	0.10	
10	060-4180310312R	double insulated wire	UL1672 18 AWG blue L=310MM	1	
11	060-4180310112R	double insulated wire	UL1672 18AWG brown L=310MM	1	
12	053-1374001104QR	MAINS SWITCH PCB	PCB MAINS SWITCH 200 SERIES	1	
13	085-0100000100R	PVC tube	φ10mm	0.22	
14	742-3000000000R	heatshrink tube	Φ30 grey	0.06	
15	022-2000042370R	Transformer	230V/100V TOROID TI-103406	1	
16	031-4200512121HR	FUSE (T4A)	T4A/250V 213 5*20MM LITTELFUSE	2	
17	053-1377001137QR	PCB of SPEAKER OUTPUT	150*52MM	1	
18	088-1027411000R	AMP PCB assembly	8200A PCBA	1	
19	001-1000205010QR	resistor	10R 1/4W 1%	4	R736.738.836.838
20	001-1500205010QR	resistor	15R 1/4W 1%	2	R517.617
21	001-4700205010QR	resistor	47R 1/4W 1%	16	R512.515-516.612.615-616.708.723.726.746-747.808.823-826.846.847
22	001-6800205010QR	resistor	68R 1/4W 1%	4	R513.514.613.614
23	001-2209205010QR	resistor	2R2 1/4W 1%	5	R518-519.618-619.962
24	001-6809205010QR	resistor	6R8 1/4W 1%	4	R347-350
25	001-2201205010QR	resistor	220R 1/4W 1%	2	R507.607
26	001-1001205010QR	resistor	100R 1/4W 1%	8	R622.731.735.831.835.911.979.980
27	001-2701205010QR	resistor	270R 1/4W 1%	3	R903.907.915

8200A -Electronic Bom-P2/8

28	001-2702205010QR	resistor	2K7 1/4W 1%	3	R508.608.909
29	001-1504205010QR	resistor	150K 1/4W 1%	3	R511.611.966
30	001-1004205010QR	resistor	100K 1/4W 1%	11	R510.610.663.751-752.851-852.951.958.961.963
31	001-4703205010QR	resistor	47K 1/4W 1%	8	R702.741-742.802.841-842.956.964
32	001-1503205010QR	resistor	15K 1/4W 1%	10	R712.739-740.812.839-840.902.905.914.916
33	001-5603205010QR	resistor	56K 1/4W 1%	1	R957
34	001-1204205010QR	resistor	120K 1/4W 1%	2	R501.601
35	001-8204205010QR	resistor	820K 1/4W 1%	4	R704.753.804.853
36	001-3302205010QR	resistor	3K3 1/4W 1%	1	R950
37	001-1005205010QR	resistor	1M 1/4W 1%	1	R960
38	001-3905205010QR	resistor	3M9 1/4W 1%	1	R969
39	001-3001205010QR	resistor	300R 1/4W 1%	1	R912
40	001-3301205010QR	resistor	330R 1/4W 1%	2	R743.843
41	001-5601205010QR	resistor	560R 1/4W 1%	1	R955
42	001-1803205010QR	resistor	18K 1/4W 1%	2	R707.807
43	001-2200205010QR	resistor	22R 1/4W 1%	4	R744-745.844-845
44	001-6801205010QR	resistor	680R 1/4W 1%	13	R908.705.706.715.716.732.734.805.806.815.816.832.834
45	001-5600205010QR	resistor	56R 1/4W 1%	2	R945.946
46	001-1002205010QR	resistor	1K 1/4W 1%	14	R301.711.717-718.811.817-818.866-871.953
47	001-1003205010QR	resistor	10K 1/4W 1%	36	R664.860-864.949.959.965.R304-311.320-327.329.337.400-405.407.408.661
48	001-2202205010QR	resistor	2K2 1/4W 1%	5	R312.525.625.714.814
49	001-1802205010QR	resistor	1K8 1/4W 1%	4	R931-934

8200A -Electronic Bom-P3/8

50	001-1801205010QR	resistor	180R 1/4W 1%	2	R947.948
51	001-1202205010QR	resistor	1K2 1/4W 1%	4	R505.506.605.606
52	001-4702205010QR	resistor	4K7 1/4W 1%	11	R300.504.509.604.609.703.803.906.910.917.952
53	001-1203205010QR	resistor	12K 1/4W 1%	2	R901.913
54	001-6802205010QR	resistor	6K8 1/4W 1%	1	R954
55	001-2203205010QR	resistor	22K 1/4W 1%	4	R937-940
56	001-2003205010QR	resistor	20K 1/4W 1%	1	R660
57	001-5602205010QR	resistor	5K6 1/4W 1%	8	R315-316.330-335
58	001-1101205010QR	resistor	110R 1/4W 1%	2	R713.813
59	001-4704205010QR	resistor	470K 1/4W 1%	2	R503.603
60	001-3304205010QR	resistor	330K 1/4W 1%	2	R502.602
61	001-1102205010QR	resistor	1K1 1/4W 1%	2	R701.801
62	001-0470308050R	resistor	4.7Ω 2W J metal film	4	R749.849.981-982
63	001-2208920100QR	cement resistor	0R22 7W+7W 10%	2	R748.848
64	008-4703002517QR	CAP	0U047 +80/-20% 25V 5YF	7	C311-312.319.320.720.820.940
65	836-2200005005QR	CAP	22P 10% 50V POLYSTYRENE	2	C300.301
66	016-6811132201QR	POLYSTYRENE CAP	CAP 680P 2.5% 100V FKP2	2	C504.604
67	016-3311132201QR	POLYSTYRENE CAP	330P 2.5% 100V FKP2 WIMA	2	C702.802
68	067-1104148000R	DIODE	IN4148	62	D946-951.953.D301.502.504-507.602.604-607.661.701-709.715-716.727-728.801.809.815-816.827-828.
69	067-3379339000QR	ZENER DIODE	DIODE BZX79C 3V3 ZENER	2	D902.904
70	067-3379629000QR	ZENER DIODE	DIODE BZX79C 6V2 ZENER	20	D400-408.717-718.817-818.870-873.903.905.945
71	067-3307912000QR	ZENER DIODE	DIODE BZX79C 12V ZENER	5	D711-712.811-812.952

72	067-3379479000QR	ZENER DIODE	DIODE BZX79C 4V7 ZENER	4	D501.601.710.810
73	067-2204002000R	DIODE	IN4002	4	D713-714.813-814
74	067-3300086000QR	ZENER DIODE	DIODE BZV86-2V0 STABLSTOR	1	D660
75	018-3200753115R	transistor	ZTX753 TO-92	5	Q709.912.809.812.944
76	018-3200653115R	transistor	ZTX653 TO-92	5	Q710-711.810-811.942
77	018-2700042115QR	transistor	TRAN ZTX457 NPN TO-92	6	Q713.813.931-932.935-936
78	018-2800310115QR	transistor	TRAN J310 N-CH FET TO-92	1	Q947
79	018-2700092115QR	transistor	TRAN ZTX757 PNP E-Line	4	Q714.814.933-934
80	018-0304382111QR	transistor	2SC4382 NPN TO-220F SANKEN	2	Q715.815
81	018-0101668111QR	transistor	TRAN 2SA1668 PNP TO-220F SANKEN	2	Q716.816
82	018-0101216110QR	transistor	TRAN 2SA1216 PNP MT-200 SANKEN	2	Q717.817
83	018-0302922110QR	transistor	TRAN 2SC2922 NPN MT-200 SANKEN	2	Q718.818
84	018-0301488111QR	transistor	2SA1488 TO-220F(SANKEN)	1	Q908
85	034-1115003307QR	rectifier	DIODE B80C 5000/3300N BRIDGE	1	D901
86	029-0800000000QR	CRYSTAL	CER CSA400MG RESONATOR	1	X300
87	024-1050101017R	relay	TQ2-5V MATSUSHITA	9	RY860-865.880-882
88	080-0315000010QR	inductor	1.5UH	2	L971-972
89	017-1380000000R	IC	LM317T(1.5A) TO-220（ST）	1	IC901
90	050-0400000000R	transistor clip	10*6MM black TR-1	1	IC901
91	017-4140000000QR	IC	74HC373N OCT3-ST PHILIPS 20PIN	1	IC965
92	017-4150000000QR	IC	SN74HC00N 4X 2-IN NAND 14PIN TI	1	IC300
93	017-4160000000QR	IC	74HC08 DIP14 TI	1	IC301
94	017-4170000000QR	IC	IC 74HC30N 8-IN NAND Philips	1	IC962
95	017-4630000000QR	IC	L272M DIP8 :ST	2	IC305,306
96	017-4180000000QR	IC	TL7705ACP 5V SUPERVISOR DIP8 TI	1	IC303
97	089-1100000012QR	switch	SWITCH MOTORISED SRBAA2603A	1	SW660
98	001-0220205014QR	resistor	2.2R，0.25W，1%	7	R313-314.318-319.340.974.977
99	001-0000105050QR	resistor	0R 1/4W 5%	1	WL901

8200A -Electronic Bom-P5/8

100	001-1001308050QR	resistor	100R 2W 5%	2	R528.628
101	001-3301308050QR	resistor	330R, 2W, 5%	2	R983.984
102	009-1031008110QR	CAP	10NF/100V 20%	3	C900.902-903
103	016-1021132201QR	CAP	FKP2 1000PF/100V 2.5% WIMA PCM5	4	C707-708.807-808
104	324-0380250101QR	insulation	38*25MM	4	transistor
105	071-2480000000QR	tie wrap	YJ-330	2	
106	001-3902205010QR	resistor	3K9 1/4W 1%	8	R524.624.729-730.737.750.829-830.837.850
107	001-2002205010QR	resistor	2K 1/4W 1%	4	R833.733.837.737
108	060-4181480412QR	12AWG WIRE	black L=148MM	1	
109	318-1377000000R	metal plate for encoder	29*9*1mm	1	
110	060-4181030312QR	12AWG WIRE	blue L=103MM	1	
111	060-4181930712QR	12AWG WIRE	yellow L=193MM	1	
112	044-2910000000R	PHONE JACK	AST-6.35-006B	1	J977
113	013-3350120505QR	CAP	3U3 10% 50V MKS2 WIMA	6	C502.505.602.605.717.817
114	018-0500369115R	Transistor	2SK369GR TO-92 TOSHIBA	4	Q701.Q801(matched pairs)
115	017-4200000000QR	IC	IC PIC16C57-XT/P 8-BIT 28PIN MICROCHIP	1	IC302
116	058-2842000000R	IC SOCKET	DIP 28PIN pitch:2.54MM round hole	1	IC302
117	056-4105221100R	connector	DJ2802-05	1	EC560
118	051-6100000001R	connector	2PIN T6302-AABF	2	J860,J863
119	024-2240501025QR	relay	G2R-24 2PCO 24V OMRON	1	RY1
120	016-3320800001R	CAP	3300P 5% 63V FKP2 WIMA PH5MM	10	C509-511.609-611.701.703.801.803
121	013-8220210505R	CAP	8200P 5% 63V WIMA PH5MM	2	C864.865
122	006-1034405003QR	E-cap	10000U 71V AUDIO 40*50	2	
123	020-5022121317R	potentiometer	5K 25% BOURNS 3329H-1-502LF	2	RV701.801
124	089-0600000018QR	switch	SRS03-46B 15KQ(MOD)	2	SW661.SW680
125	020-2031321123HR	motorize potentiometer	20K ALPS RK16812MG 15A	1	VR660
126	017-1276000000R	IC	OPA2134PA 2X OP AMP DIP-8 TI	1	IC1
127	006-2204051153HR	E-cap	ELNA 22U 20% 35V RE3-35V220ME3 5*11mm	4	C715-716.815-816
128	016-2240320504QR	POLYSTYRENE CAP	0U22 10% 100V MKS2	2	C712.812
129	016-0141100001R	POLYSTYRENE CAP	0U01 5% 100V MKS2 WIMA PH5MM	5	C660.718-719.818-819

130	016-4740810001R	POLYSTYRENE CAP	0U47 10% 63V MKS2 WIMA PH5MM	1	C938
131	016-1041300001R	POLYSTYRENE CAP	0.10uf 250v 5% PH=10MM WIMA	1	C901
132	016-3331100001R	POLYSTYRENE CAP	0U033 5% 100V MKS2 WIMA PH5MM	4	C931-934
133	016-1041100001R	POLYSTYRENE CAP	0U1 5% 100V MKS2 wima ph5mm	24	C302.305-307.313-318.506.606.709-711.809-811.907.910.915.935.962.964
134	006-1004051133HR	E-cap	ELNA 10U 20% 16V RE3-16V100ME3 5*11mm	3	C308.309.911
135	006-4704051133HR	E-cap	ELNA 47U 20% 16V RE3-16V470ME3 5*11mm	2	C704.C804
136	006-1014162552QR	E-cap	ELNA RE3-35V-101M F3 100UF 35V	4	C310.936.937.939
137	006-1014102053HR	E-cap	100UF 35V 20% RFS-35V101MH5 10*20 ELNA	2	C508.C608
138	006-4714081133HR	E-cap	ELNA 470U 20% 16V RE3-16V471MG3 8*11.5mm	3	C905.909.913
139	006-4714101653HR	E-cap	ELNA 470U 20% 35V RE3--35V471MH4 10*16mm	2	C906.914
140	006-4794051173HR	E-cap	ELNA 4U7 20% 63V RE3-63V4.7ME3 5*11mm	7	C501.601.C661.713-714.813-814
141	013-4730320504QR	CAP	CAP 47000P 20% 100V X7R CER	2	VR660
142	306-1003770011QR	mian heatsink	anodized	1	
143	306-1003770001QR	heatsink 1	anodized	1	
144	306-1003770002QR	heatsink 2	anodized	1	
145	306-1003770003QR	heatsink 3	anodized	2	
146	306-1027410005R	heatsink 5	anodized, black	4	
147	306-1027410006R	heatsink 6	anodized, black	4	
148	306-1027410003R	heatsink	anodized, black	2	
149	306-1027410001R	heatsink 1a	anodized, black	1	
150	306-1027410002R	heatsink 2a	anodized, black	1	
151	306-1027410000R	T type heatsink	anodized, black	1	
152	588-3000256037R	screw	M3*25	4	transistor+mian heatsink4
153	500-3050240300AR	nut	M3 NI	5	transistor+mian heatsink4,T type
154	513-3007050080R	washer	φ3*φ7*0.5 Zn	4	transistor+mian heatsink4

155	517-3008080130AR	washer	Φ3.1*Φ4.7*0.8	4	transistor+mian heatsink4
156	588-3000206037R	screw	M3*20	1	T type heatsink 1
157	016-1001120001R	CAP	10P 20% 100V pitch:5MM length:11MM	2	C904.912
158	016-2201120001R	CAP	22P 20% 100V pitch:5MM length:13MM	2	C507.607
159	001-4701205010QR	resistor	470R 1/4W 1%	16	R941-944.R709.710.727.728.755.809.810.827.828.855.935.936
160	001-1502205010QR	resistor	1K5 1/4W 1%	2	R967.968
161	013-1010310507R	CAP	100pF 100V 5%	8	C705-706,805-806,C303,C908,C503,C
162	018-1400546115-1R	transistor	BC546BRL1G TO-92 ON	23	Q660-662.705-706.708.719.721.805-806.808.819.Q821.902-903.905-906.910-911.939.941.943.945
163	018-0303851111QR	transistor	2SC3851 TO-220F(SANKEN)	2	Q904.Q912
164	223-0414210201R	plastic standoff	white ABS PW-6 height 2mm	2	X300
165	053-102741A000R	8200A-AMP PCB	two layer 407.7*294.6*2.0MM	1	
166	051-1006334035-1R	SOCKET	SOCKET 4WAY PHONO GOLD PLATED T6288-AABF up white/down red	5	J860-863
167	060-4120210012R	12AWG WIRE	red UL1617/AWG L=215MM	1	
168	060-4120120512R	12AWG WIRE	white UL1617/AWG L=125MM	1	
169	060-4120150012R	12AWG WIRE	red UL1617/AWG L=155MM	1	
170	060-4120180512R	12AWG WIRE	white UL1617/AWG L=185MM	1	
171	588-3000086037R	screw	M3*8	6	heatsink 1a-1，heatsink 5 4，heatsink 2a-1，heatsink
172	588-3000066037R	screw	M3*6	4	mian heatsink+AMP PCB

8200A -Electronic Bom-P8/8

173	001-3002207010R	resistor	nonflammable metal film H-FM 2WS 3K3 ±1% size11*4.5*0.8MM	4	R719-720.819-820
174	001-3002205010QR	resistor	3K 1/4W 1%	1	R406
175	001-3002208010R	resistor	nonflammable metal film L-MF1WS 3K0 1W ±1%	8	721-722.724-725.821-822.824-825
176	018-1400550115-1R	transistor	BC550B NPN TO-92 FAIRCHILD	14	Q501-502.506-509.511.601-602.606-609.611
177	018-1400560115-1R	transistor	BC560B PNP TO-92 FAIRCHILD	10	Q503-505.510.512.603-605.610.612
178	018-1400556115-1R	transistor	BC556B PNP TO-92 Fairchild	26	Q907.909.937~938.940.946,Q400~407,702~704,707,720,802~804,807,820,860,901
179	088-1027414200R	IR PCBA	PCBA	1	
180	053-1027411046R	8200A IR PCB	single layer,54*28*1.6MM,FR4 20Z	1	
181	019-0011022000QR	LED	LED/ RED	2	D200.201
182	055-0305025344R	FLAT WIRE	5P L=250MM UL2468 26AWG	1	EC02
183	052-2100000000R	IR EMITER	TSOP4836	1	IR
184	009-1040508110R	CAP	100nF 50V 20%	1	C200
185	001-2200205010QR	resistor	22R 1/4W 1%	2	R203.204
186	001-2209205010QR	resistor	2R2 1/4W 1%	1	R202
187	001-8201205010QR	resistor	820R 1/4W 1%	2	R200,R201
188	223-0532220301R	plastic post	3-3	2	D200,D201
189	018-1400550115-1R	transistor	BC550B NPN TO-92 FAIRCHILD	2	Q201,Q202

audiolab

UK: IAG House, Sovereign Court, Ermine Business Park, Huntingdon, Cambs, PE29 6XU, UK
UK : Tel: + 44 (0) 1480 447700. Fax: + 44 (0) 1480 431767, www.audiolab.co.uk
CHINA: Sanecore Industrial Park, Jiuwei, Xixiang, Shenzhen, China 518102
CHINA: Tel: + 86-755-2748-4420. Fax: + 86-755-2965-1484
The information in this service manual is subject to change without notice.
All rights reserved © IAG Group Ltd. Audiolab is a member of the IAG Group.